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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,217	01/23/2004	Lynn Van Erden	SYMXP002X1C1	9148
47472	7590	06/22/2006	EXAMINER	
Law Offices of Cindy Kaplan/Symyx P.O. BOX 2448 SARATOGA, CA 95070			HANDY, DWAYNE K	
			ART UNIT	PAPER NUMBER
			1743	

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/764,217

**Applicant(s)**

VAN ERDEN ET AL.

**Examiner**

Dwayne K. Handy

**Art Unit**

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 and 14-18 is/are allowed.
- 6) ☒ Claim(s) 8-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 11 recites the limitation of the plurality of check valves being contained within the cover. This is unclear. Independent claim states that the check valves are each configured to allow flow from the pressure chamber into one or more plurality of reaction wells and restrict flow from one or more reaction wells into the pressure chamber.

The examiner fails to see how the check valves may be in the cover – as required by claim 11 – while also being configured to allow flow from the pressure chamber into one or more plurality of reaction wells and restrict flow from one or more reaction wells into the pressure chamber- as required by claim 8.

### ***Inventorship***

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 8-10, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brenner et al. (6,537,500) in view of Kilcoin et al. (6,190,619).

Brenner teaches a device and process for the reaction of a catalytic material with a reaction gas. The device is best shown in Figure 1. It includes a body (6) having a plurality of recesses (7) for holding a catalyst (20) on a frit (16), a lid (10) with holes (17, 18) for conveying reaction gas into the supply chamber (19) and recesses (7). Brenner

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recites a process for using the device – including at high pressures - in column 5.

Brenner teaches every element of claims 8-13 except for a flow restriction device comprised of a plurality of valves.

Kilcoin teaches a system for parallel synthesis of compounds. The system is comprised of a body (22) for holding reaction vessels (16) and a manifold (38) that includes lid (20) with passages (42, 44) for adding and removing materials from the reactors. The reactors have lids (54) with passages that mate with passages in the manifold lid (20) in a sealing manner to form a valved passage.

Although not restricted in this manner, the first valve portion such as manifold 38 is typically located in the lid 20, while the second valve portion 54 is couplable to the reaction vessel 16. This embodiment (FIG. 3) creates a valve wherein the sealing surfaces are accessible and openable. When lid 20 is open, sealing surfaces on the fluid manifold 38 and cap vent 54 are separated. By dividing the valve into two portions, this allows part of the valve to be a disposable, consumable product. By creating the seal between parts such as on the fluid manifold 38 and cap vent 54 of the reaction vessel 16, the present invention advantageously allows greater flexibility in designing one part to be consumable and simpler to manufacture. Additionally, where the reaction vessel 16 rotates with the cap vent 54, the number of moving parts are reduced since the cap vent 54 has the dual role of being a plug for reaction vessel 16 while also being a rotatable surface 70 of the valve portion. Preferably, the cap vent 54 including hub 68 comprises a single, continuous part as shown in FIGS. 15 and 16. This continuous body configuration facilitates manufacturing and simplifies the design of the potentially disposable portions of the present apparatus. In some embodiments, the valve or sealing device used in the present invention may be viewed as having a nonrotatable part (manifold 38) and a rotatable part (cap vent 54 and reaction vessel 16).

As shown in FIG. 15, first and second fluid passages 72, 74 extend through cap vent 54 to the interior 60 of reaction vessel 16. In the preferred configuration, passage 72 functions as an inlet passage while passage 74 functions as a vent passage to allow venting of gasses while liquid is being delivered into the reaction vessel 16. Passages 72, 74 preferably have a larger diameter at the lower or vessel side of cap vent 54 than at the upper or sealing surface 70 side of the cap vent. The passages are typically separated by a bypass distance indicated by arrow 75.

Kilcoin states that linear translational valves with independently movable portions may be used rather than rotational valves (col. 12, lines 37-44). It would have been obvious to one of ordinary skill in the art to combine the valve teachings from Kilcoin with the device of Brenner et al. (6,537,500). One would add the valve teaching from Kilcoin in order to provide isolated and controlled fluid communication to and through the reactors.

***Allowable Subject Matter***

5. Claims 1-7 and 14-18 are allowed.

6. The following is an examiner's statement of reasons for allowance:

Claims 1 and 14 recite a parallel batch reactor comprising a pressure chamber, an inlet port in fluid communication with the pressure chamber, and a plurality of reactions wells. *Each of the reaction wells is in isolatable fluid communication with the pressure chamber such that during a first stage of operation each well can be simultaneously pressurized through common fluid communication with the pressure chamber and can also be fluidically isolated from at least one of the other wells.*

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. The Examiner also notes for the record that the reference Brenner was previously cited but not applied. This was an oversight by the Examiner. Brenner has now been applied in combination with the Kilcoin reference again claims 8-13. These claims do not recite the limitations from claim 1 and 14 cited above.


**Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne K. Handy whose telephone number is (571)-272-1259. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DKH  
June 18, 2006

  
Jill Warden  
Supervisory Patent Examiner  
Technology Center 1700